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EXAMINER

BRANT, DMITRY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2655

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/818,207

Applicant(s)

CASE ET AL.

Examiner

Dmitry Brant

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03/27/2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hata et al. The table below summarizes the limitations of this application and the parts of Hata et al. that meet these limitations.

| Claim # | Limitations   | Hata et al.   |
|---------|---|---|
| 1       | A method for converting text to concatenated voice by utilizing a digital voice library and a set of playback rules, the digital voice library including a plurality of speech items and a corresponding plurality of voice recordings wherein each speech item corresponds to at least one available voice recording, the method comprising:<br><br>receiving text data<br><br>expanding the text data to form a sequence of text and pseudo words | <br><br><br><br><br><br><br><br><br><br>(Col. 4, lines 58-63)<br><br>(82, 84, 86, FIG. 2a) and (Col. 5, lines 6-15) |

|   |   |  |
|---|---|--|
|   | <p>converting the sequence of text and pseudo words into a sequence of speech items in accordance with the digital voice library</p> <p>converting the sequence of speech items into a sequence of voice recordings in accordance with the set of playback rules</p> <p>generating voice data based on the sequence of voice recordings by concatenating adjacent recordings in the sequence of voice recordings.</p> | <p>(98, FIG. 2b)</p> <p>(100, FIG. 2b)</p> <p>(112, FIG. 2b)</p> |
| 5 | <p>The method of claim 1 wherein expanding the text data further comprises:</p> <p>searching the text data for a number that includes a comma and</p> <p>expanding any number that includes a comma contained in the text data into at least one pseudo word.</p>   | <p>Col. 5, lines 42- 44</p>                                      |

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata et al. in view of Holm et al. (5,850,629)

As per claims 2 and 3, Hata et al. do not disclose searching the text data for an abbreviations/numerical suffixes and expanding any abbreviation contained in the text data into at least one pseudo word.

Holm et al. teaches expanding abbreviations (FIG. 10). Numerical suffixes are also a type of abbreviation used to write numerical sequences in a shorthand notation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Holm et al., in order to properly pronounce text containing abbreviations such as “Mr.” or “5th.” and also to detect sentence boundaries.

As per claim 4, Hata et al. do not disclose “searching the text data for a telephone number and expanding any telephone number contained in the text data into at least one pseudo word.”

Holm et al. teaches expanding telephone numbers (Col. 10, lines 53-57)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Holm et al., in order to properly pronounce text containing telephone numbers, since these numbers would be pronounced differently from regular number sequences.

As per claim 6, Hata et al. do not disclose “searching the text data for an Internet mail address and expanding any Internet mail address contained in the text data into at least one pseudo word.”

Holm et al. teaches expanding abbreviations and acronyms (FIG. 10), as well as ways to handle e-mail addresses (Col. 14, lines 15-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Holm et al., in order to properly pronounce text containing abbreviations containing e-mail addresses and also detect sentence boundaries.

As per claim 7, Hata et al. do not disclose “searching the text data for an Internet Universal Resource Locator and expanding any Internet Universal Resource Locator in the text data into at least one pseudo word.”

Holm et al. teaches expanding abbreviations and acronyms (FIG. 10), as well as ways to handle e-mail addresses (Col. 14, lines 15-21). Similar to e-mail, web addresses in URL format also constitute special abbreviations containing special characters, such as HTML tags.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Holm et al., in order to properly pronounce text containing web addresses and other HTML related information.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hata et al. in view of Syrdal (6,601,030).

As per claim 8, Hata et al. do not disclose “parsing the sequence of text and pseudo words to determine any phrases”.

Syrdal discloses parsing text and identifying phrases (Abstract, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Syrdal et al., in order to identify phrases in text and check whether corresponding audio files exist in the database. In this situation, the use of pre-canned phrases would speed up the conversion of text to speech because it would not require additional processing to construct phrases out of individual words.

As per claim 9, Hata et al. do not disclose “parsing the sequence of text and pseudo words to determine any words”.

Syrdal discloses parsing text and identifying words (Abstract, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Syrdal et al., in order to identify words in text and check whether corresponding audio files exist in the database. In this situation, the use of pre-canned words would speed up the conversion of text to speech because it would not require additional processing to construct words out of individual syllables.

As per claim 10, Hata et al. do not disclose “parsing the sequence of text and pseudo words to determine any syllables”.

Syrdal discloses parsing text and identifying sounds (Abstract, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hata et al. as taught in Syrdal et al., in order to identify sounds comprising unfamiliar words. In this case, the system would have to construct unfamiliar words that are not in the database using syllable concatenation. (The details of this process are described in Coorman et al. (6,665, 641) and Pearson et al. (6,144,939))

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Coorman et al. (6,665, 641) teach a text-to-speech system using concatenation of speech waveforms.

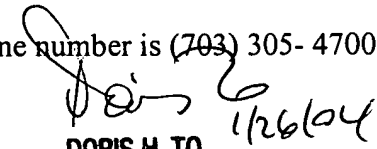
Pearson et al. (6,144,939) teach the concatenate speech synthesizer.

Chung et al. (6,155,686) teach HTML to speech converter

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Brant whose telephone number is (703) 305-8954. The examiner can normally be reached on Mon. - Fri. (8:30am - 5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Ivars Smits can be reached on (703) 306-3011. The fax phone number for the organization where this application or proceeding is assigned to (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Tech Center 2600 receptionist whose telephone number is (703) 305- 4700.

  
DORIS H. TO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600



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Art Unit: 2655

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